

Figure 1

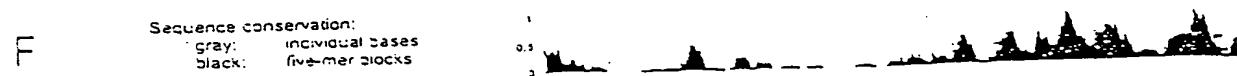
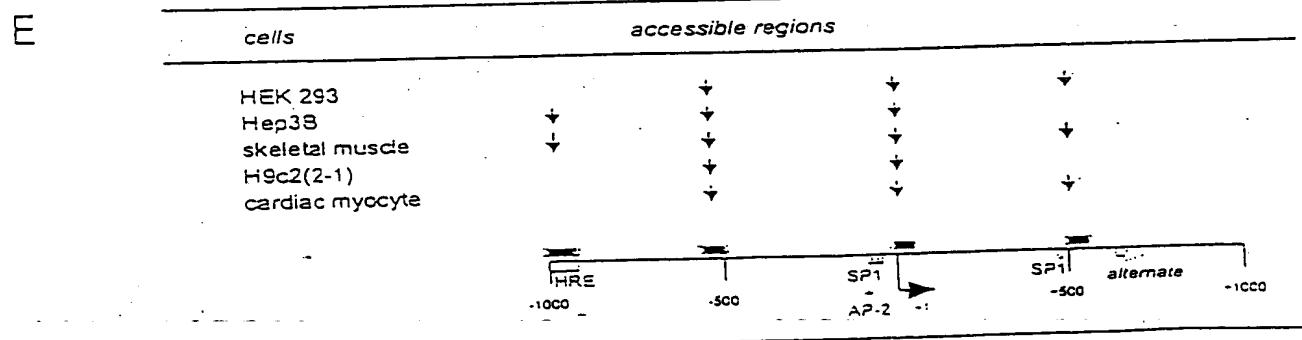
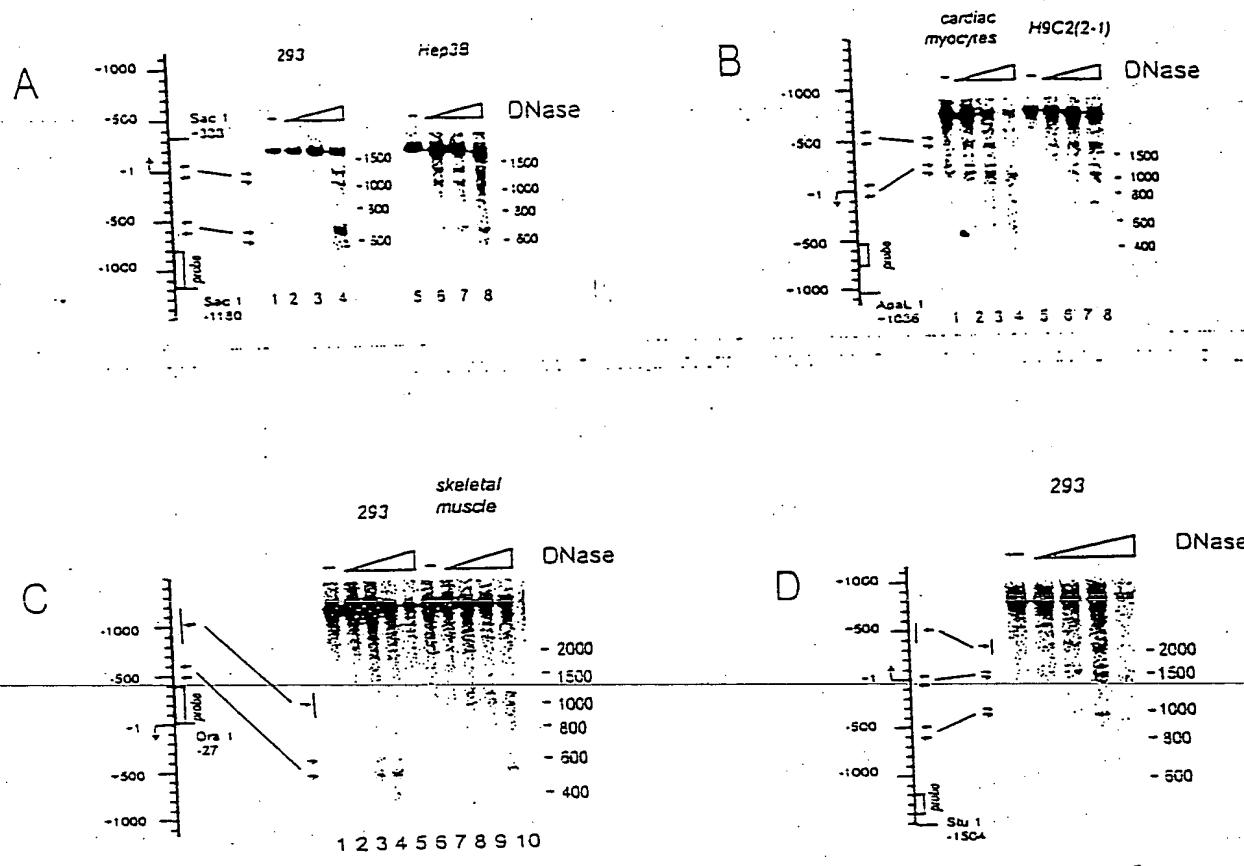
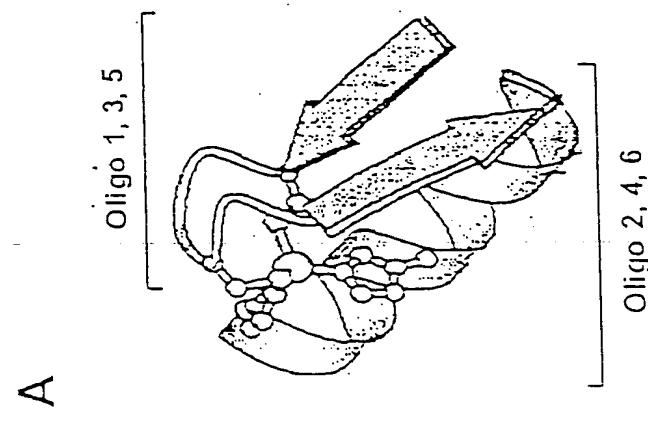
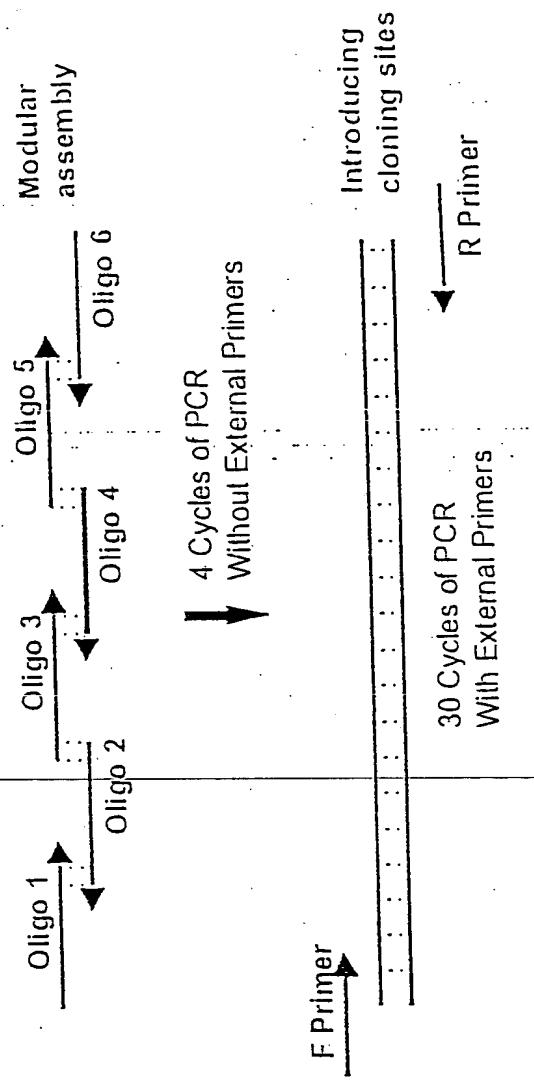


Figure 2



B



C

$P_{lac}$	Maltose binding protein	ZFP
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# Figure 2

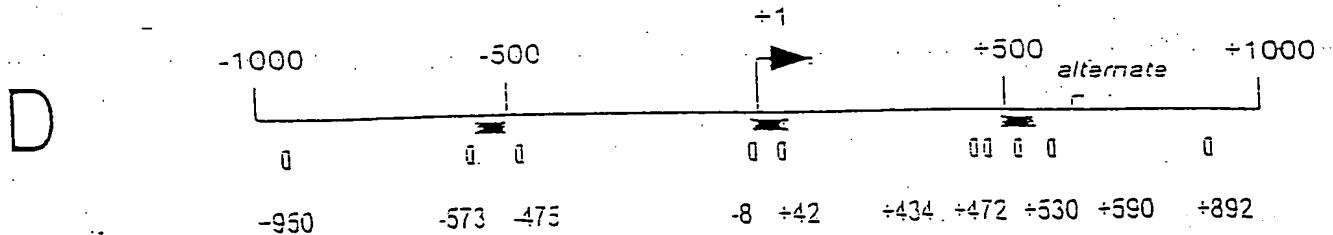


Figure 3

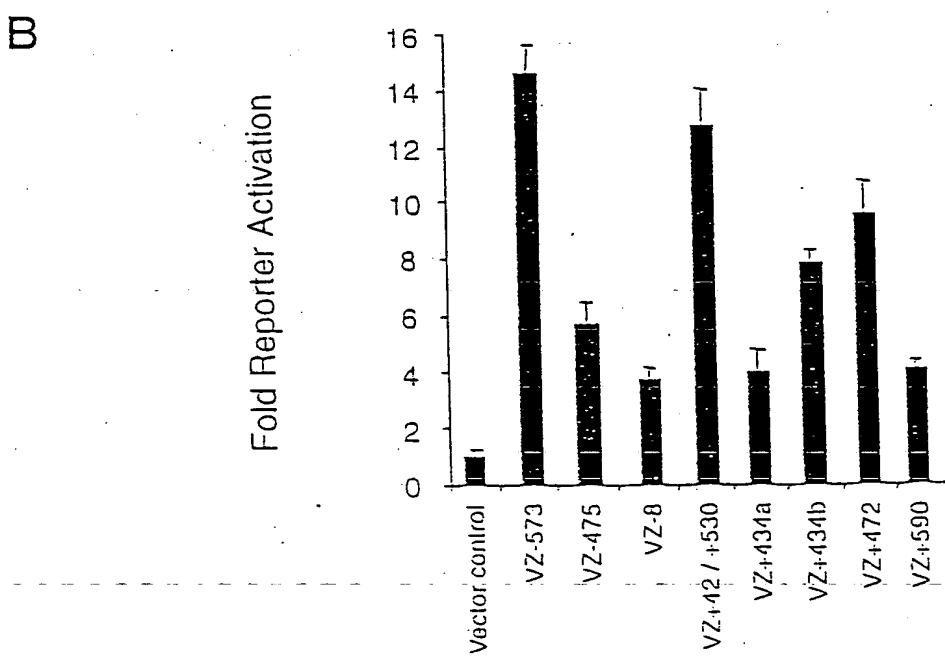
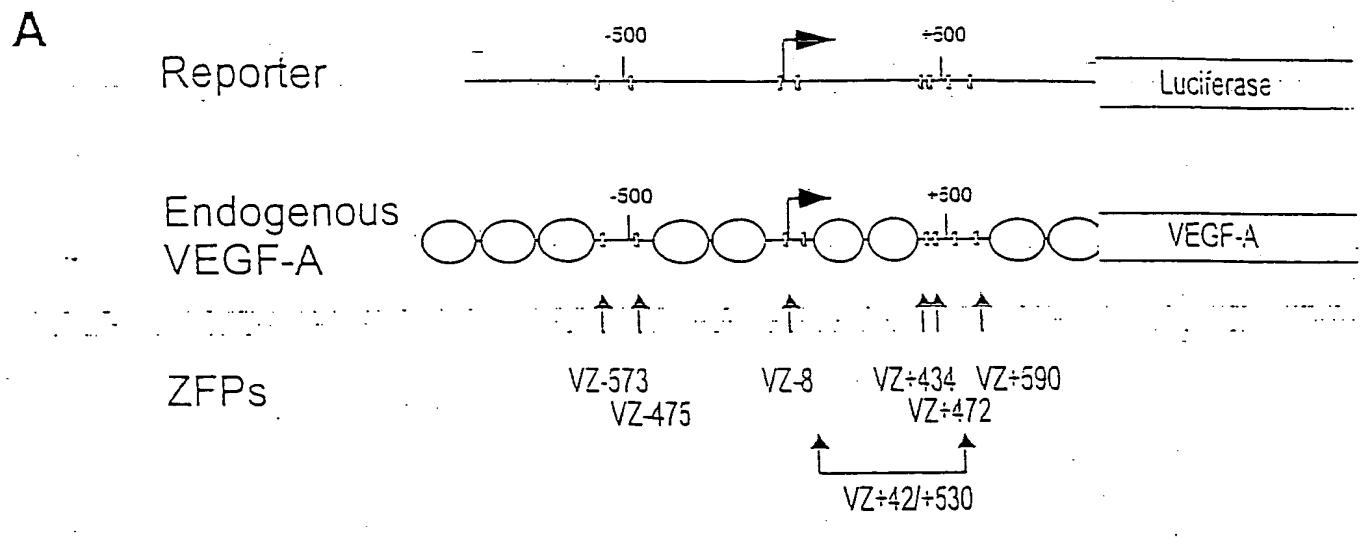
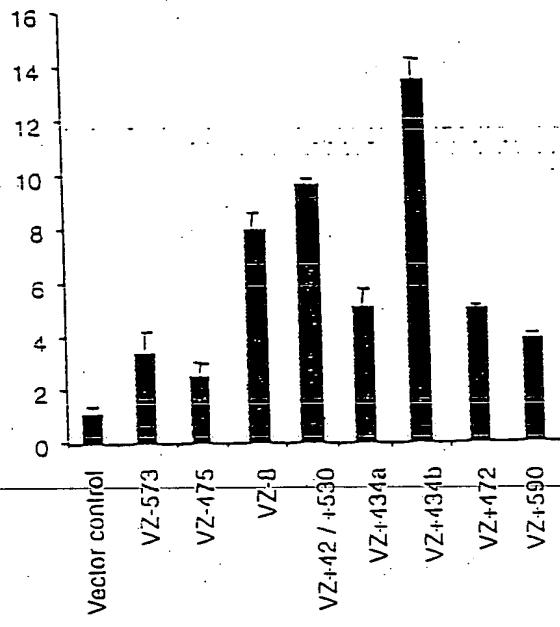


Figure 3

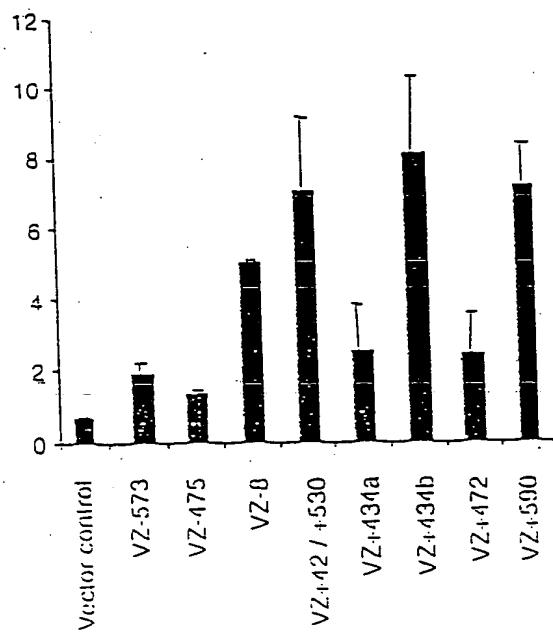
C

VEGF-A Protein Production  
Fold Activation



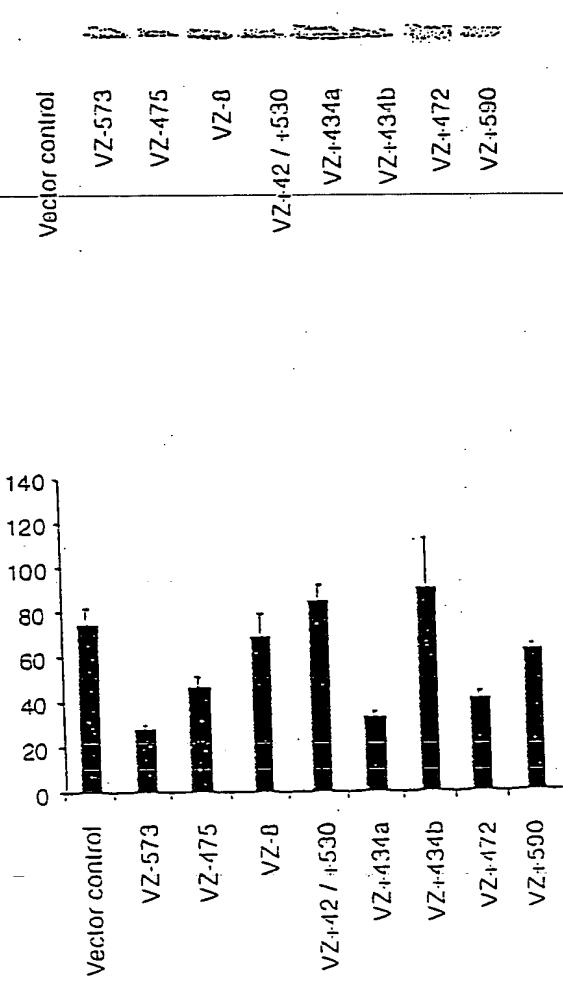
D

VEGF-A mRNA Activation  
(VEGF-A/GAPDH ratio)

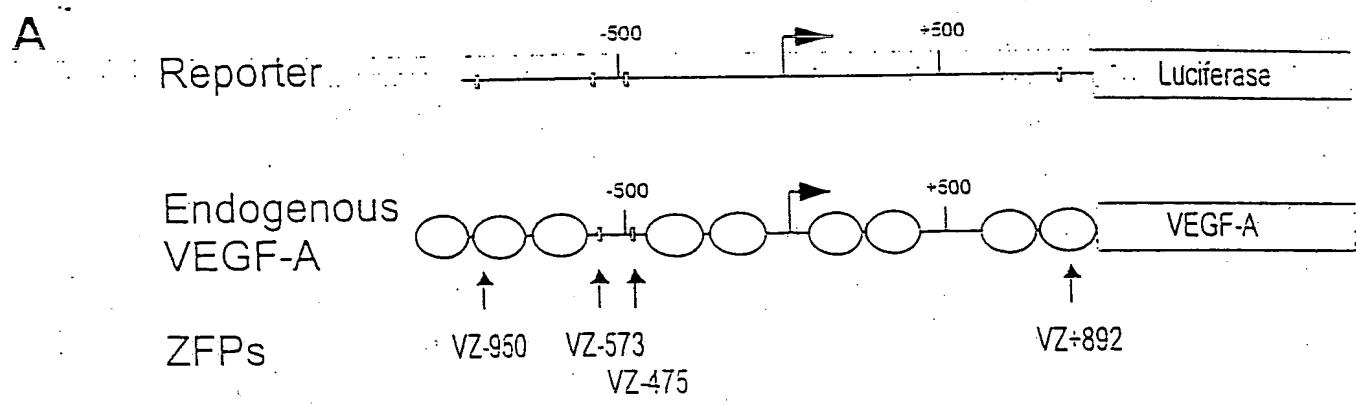


**Figure 3**

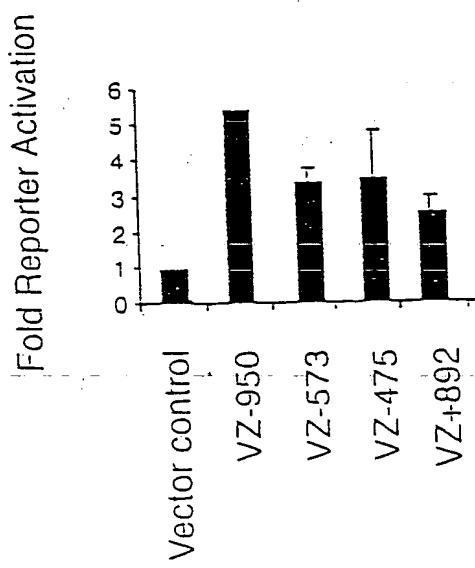
Relative ZFP mRNA levels  
(NP16 / GAPDH by Taqman)



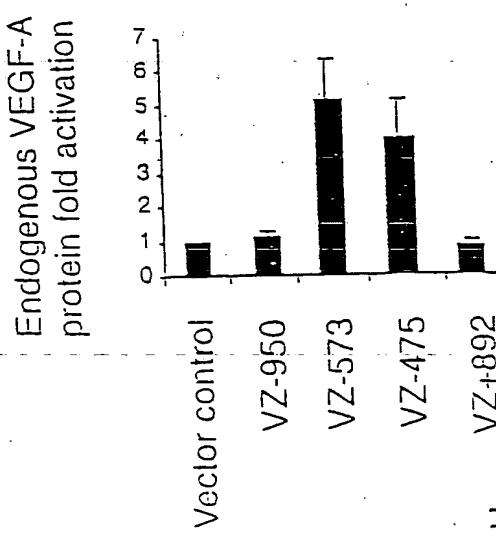
**Figure 4**



**B**



**C**



# Figure 5

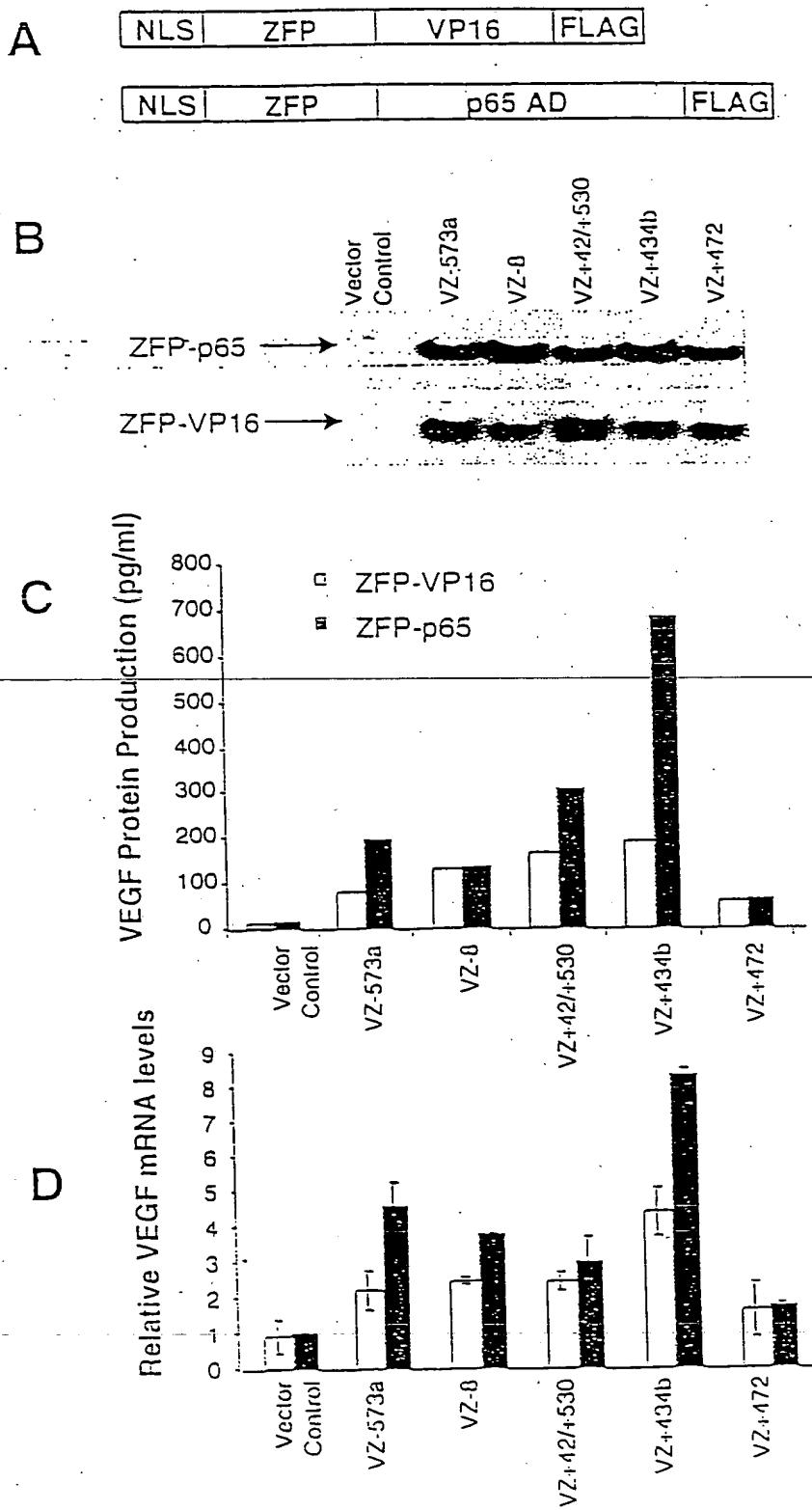
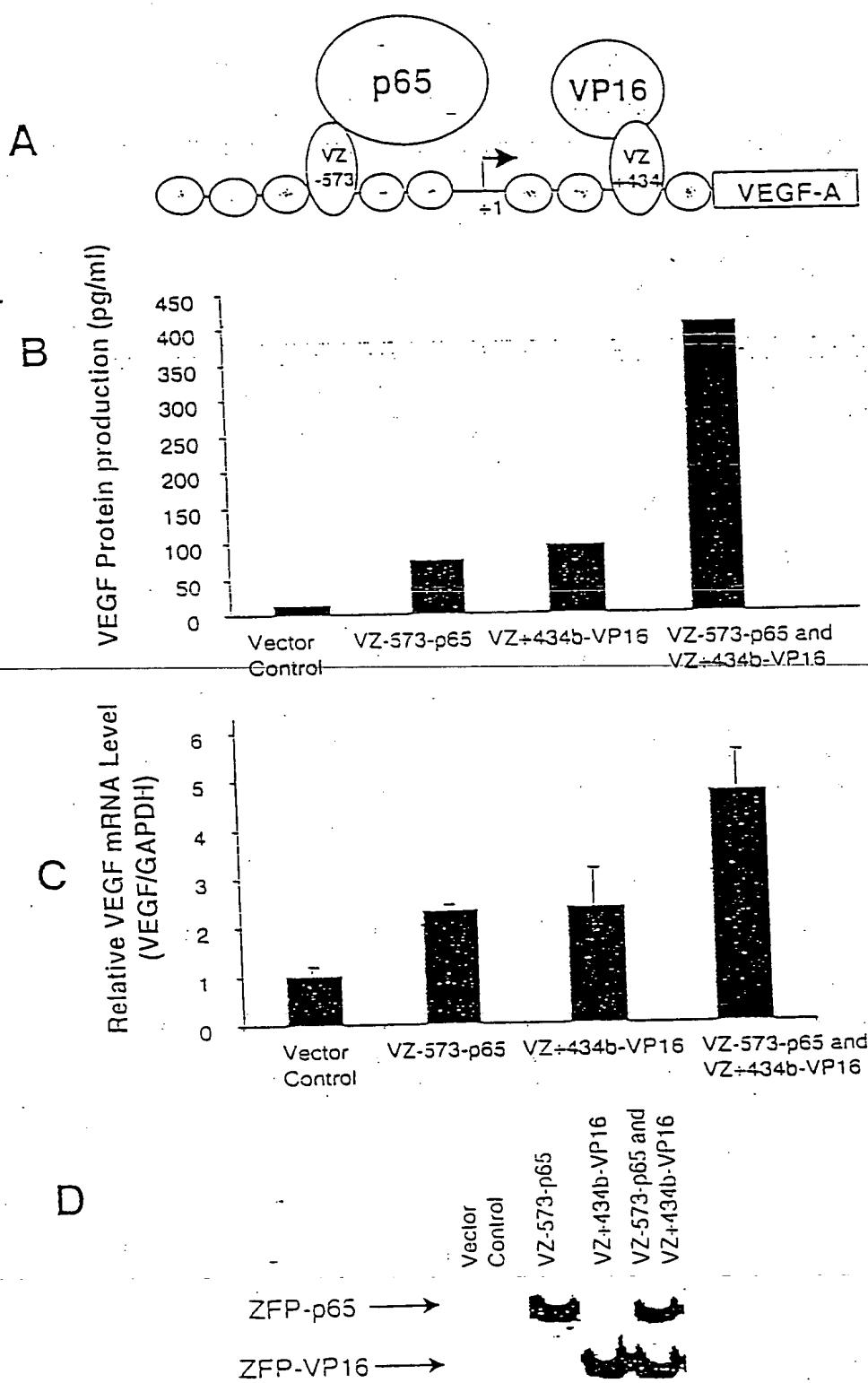


Figure 6



**Figure 7**

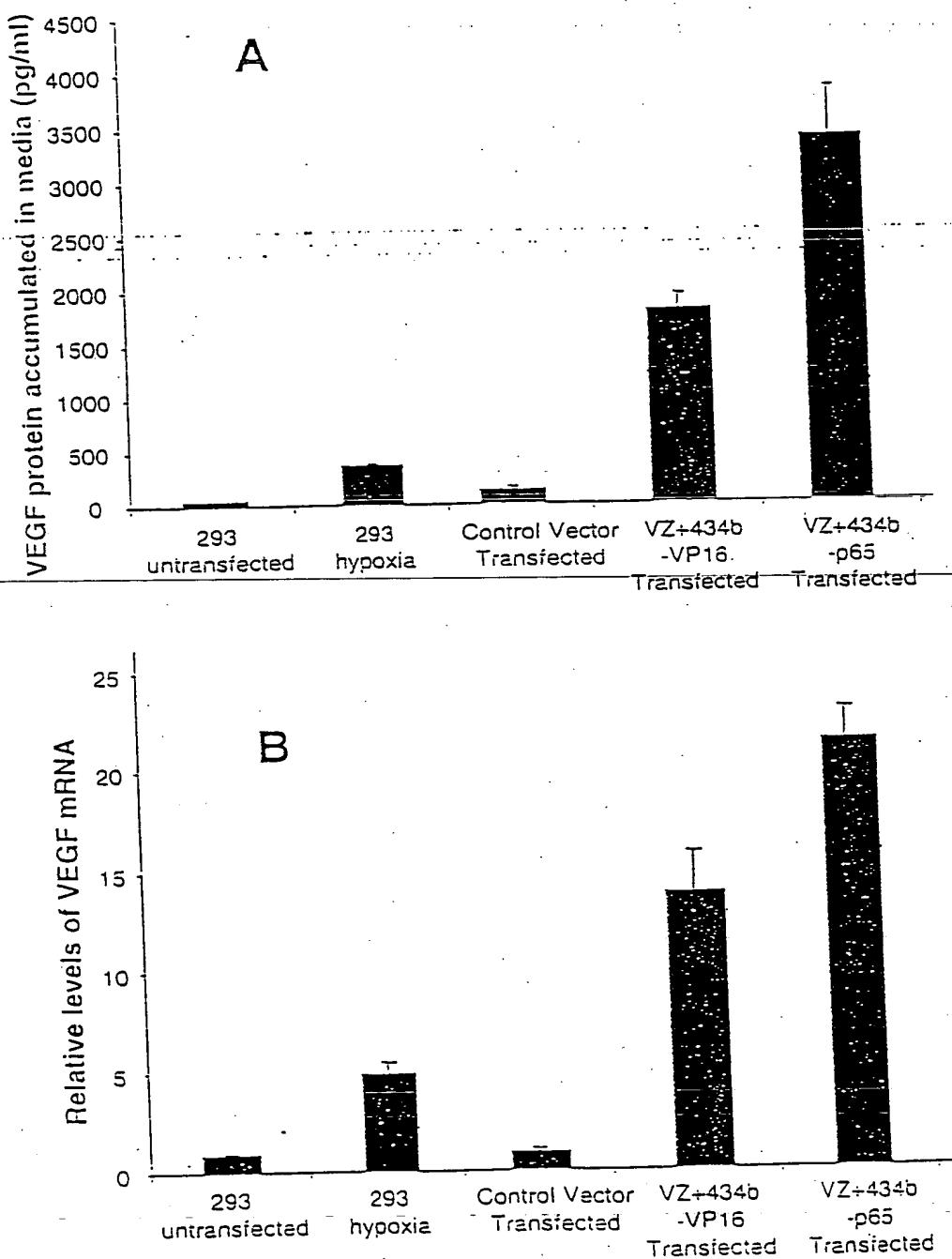
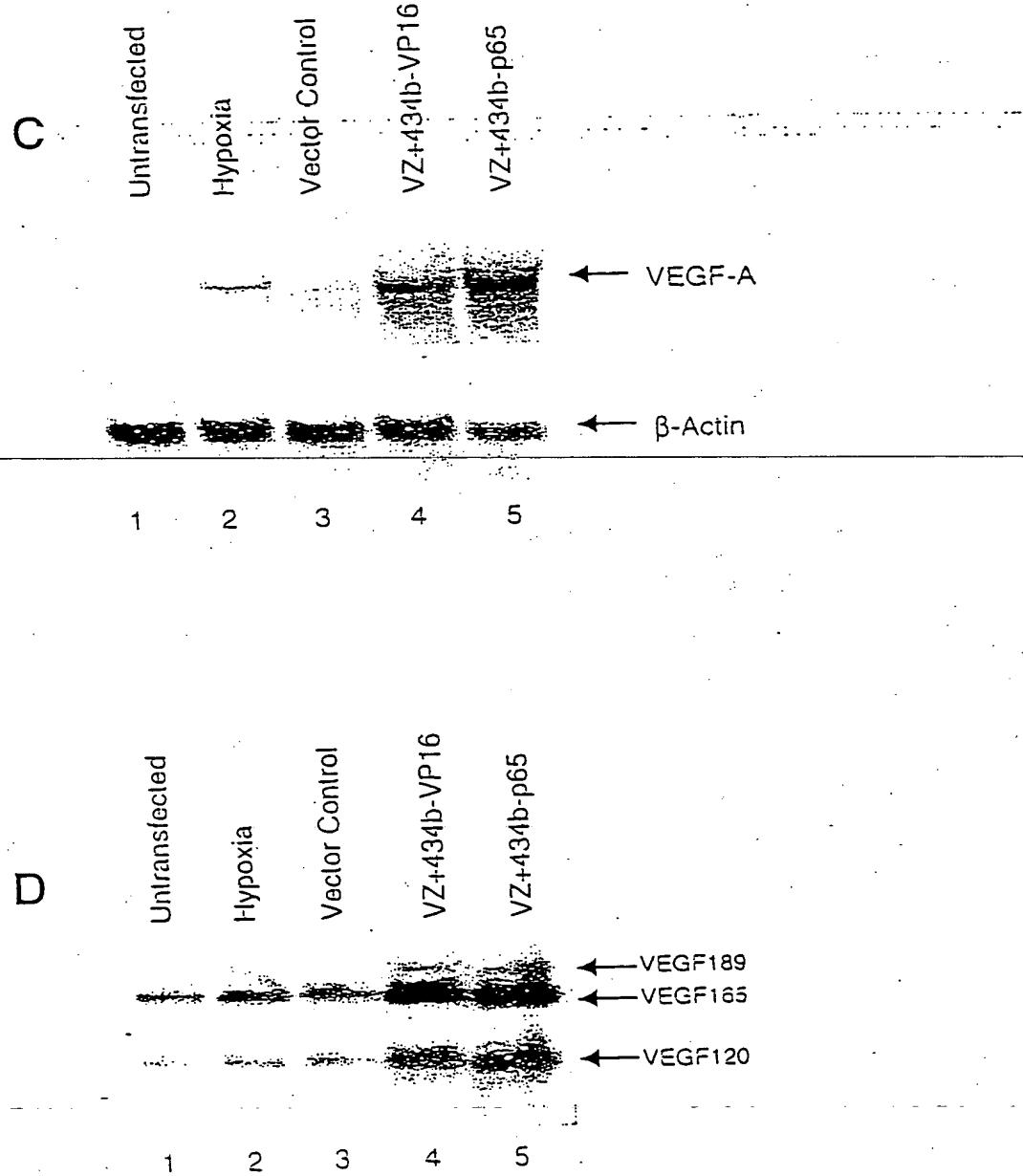


Figure 7



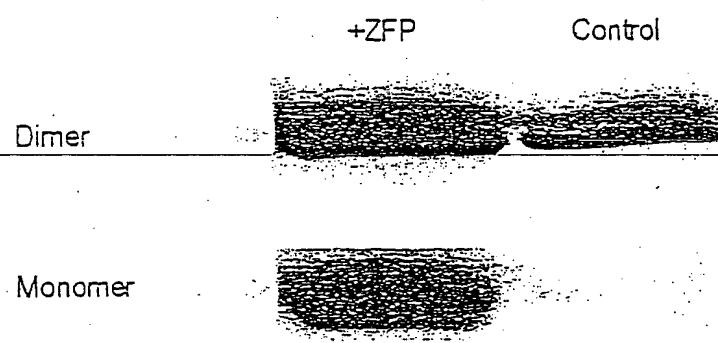


FIG. 8

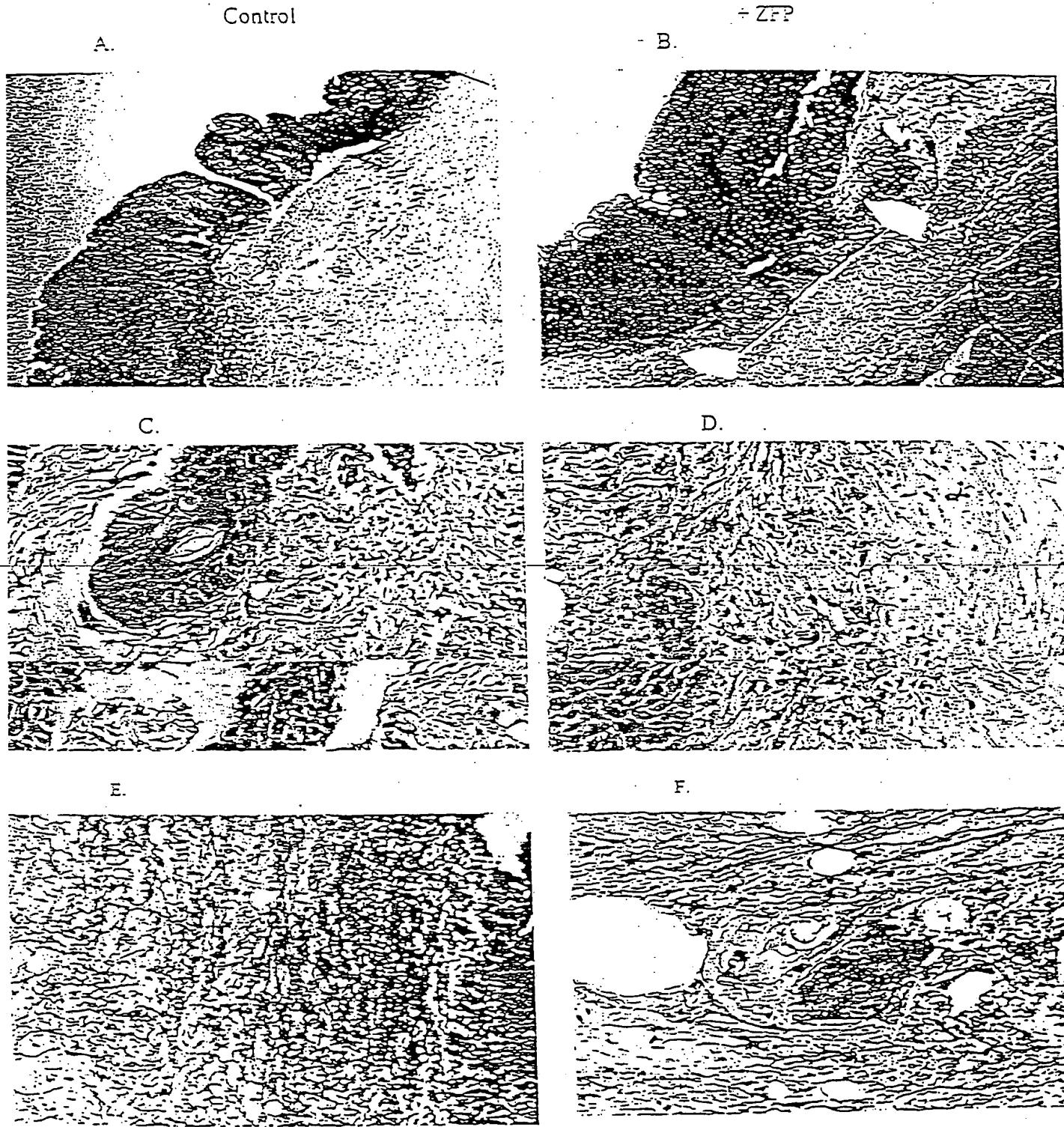


FIG. 9

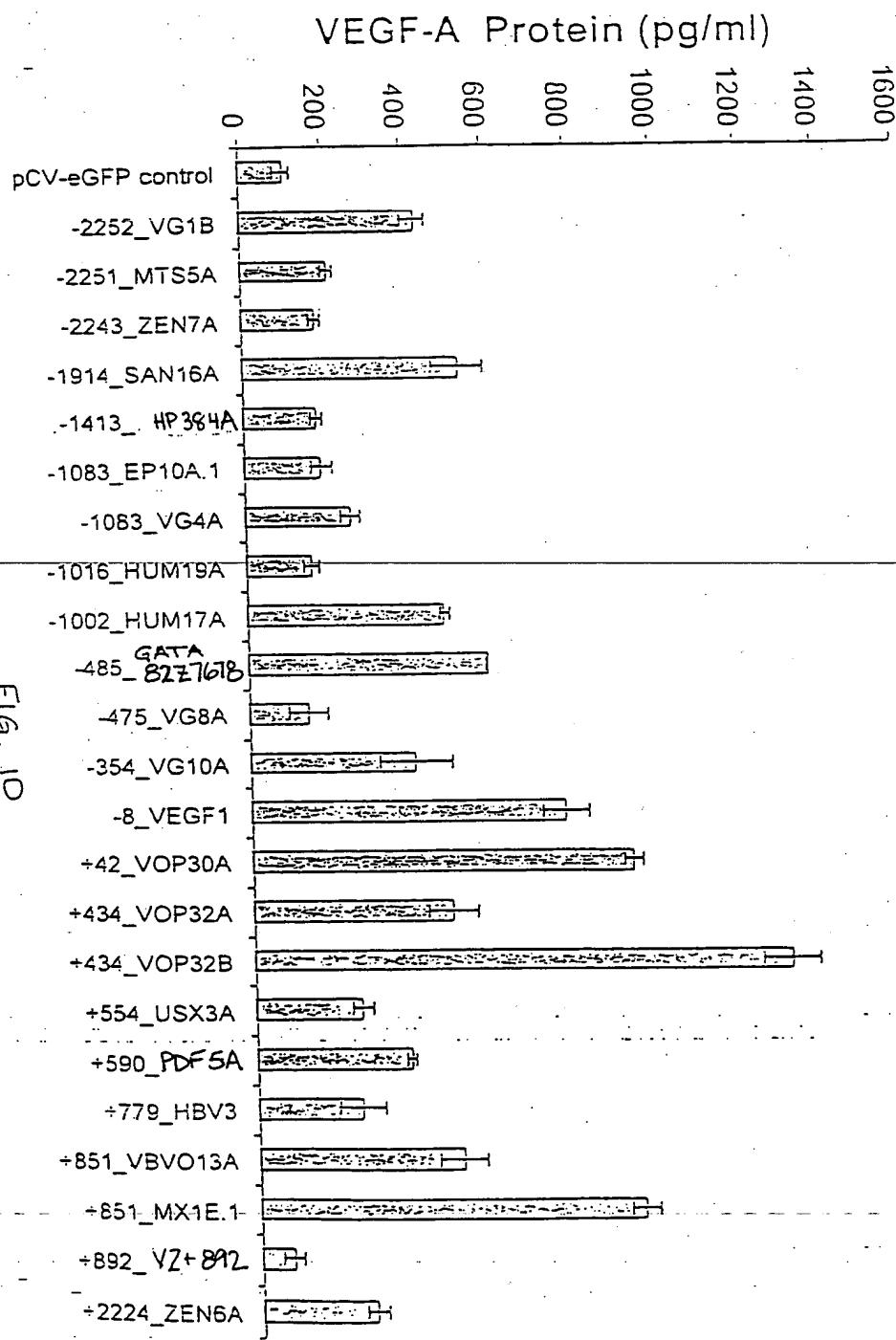


FIG. 10

ZFP →  
Protein

VEGF/GAPDH  
(mRNA Level by Taqman)

0 2 4 6 8 10 12

eGFP Control

-2252\_VG 1B

-2251\_MTS 5A

-2243\_ZEN 7A

-1914\_SAN 15A

-1413\_HP384A

-1083\_EP 10A

-1083\_VG 4A

-1016\_HUM 19A

-1002\_HUM17A

GATA  
-485\_827767B

-475\_VG 8A

-354\_VG 10A

-8\_VEGF 1

+42\_VOP 30\_4

+434\_VOP 32A

+434\_VOP 32B

+554\_USX 3A

+590\_PDF5A

+779\_HBV 3

+851\_BVO 13A

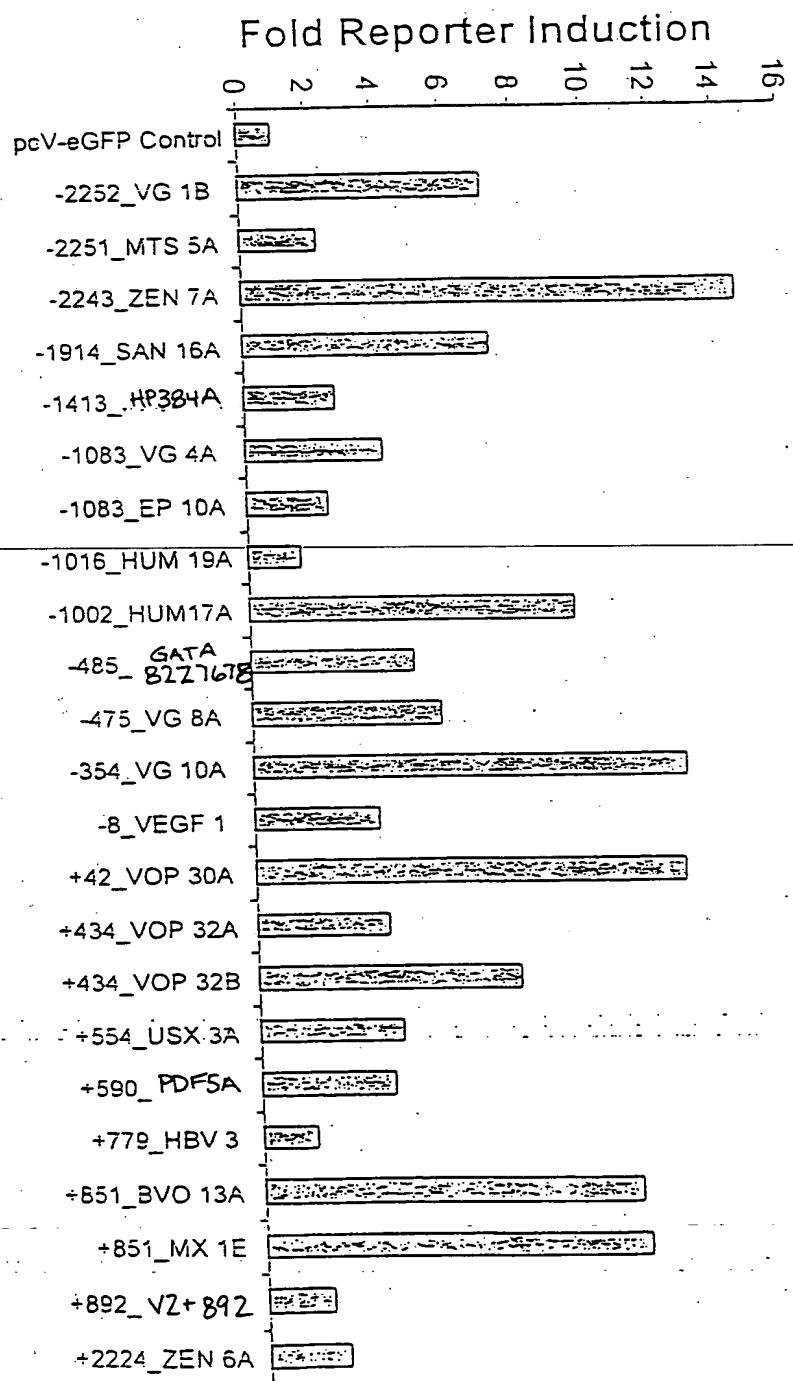
+851\_MX 1E

+892\_VZ+892

+2224\_ZEN 5A

J. D. O. E. O. S. " J. E. U. E. J. I.

Fig. 11



100000000 120501

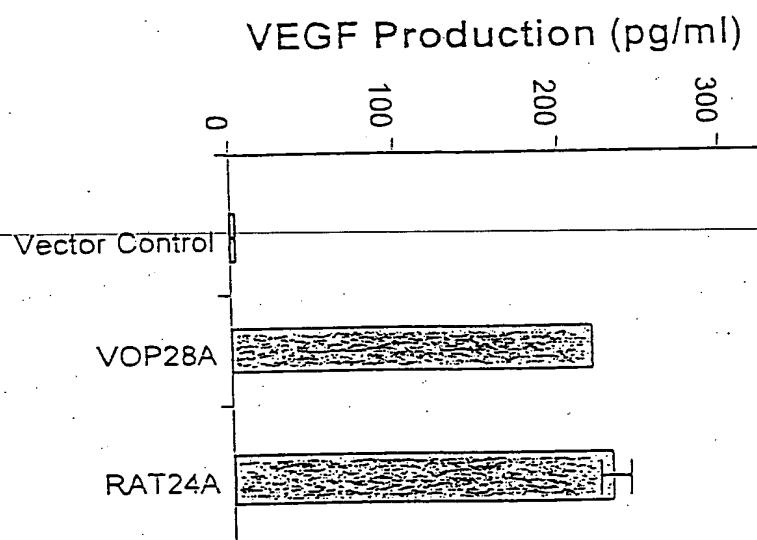


FIG. 13

**Figure 14.**

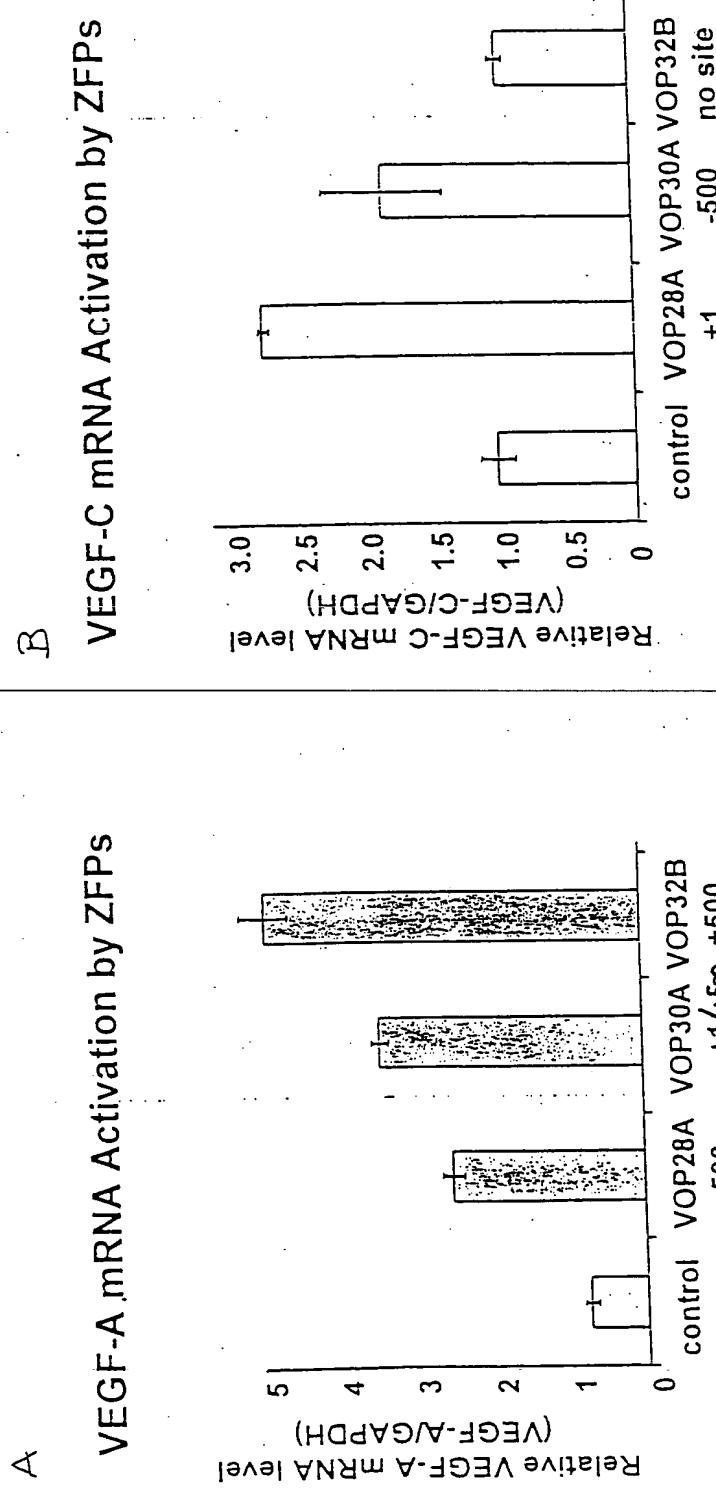
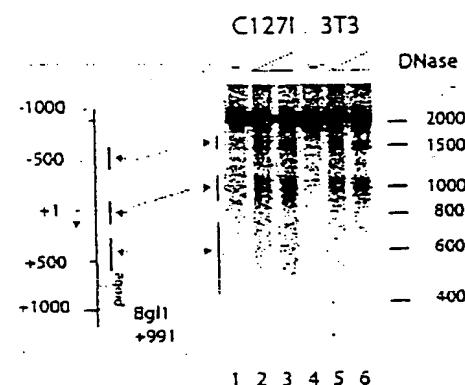
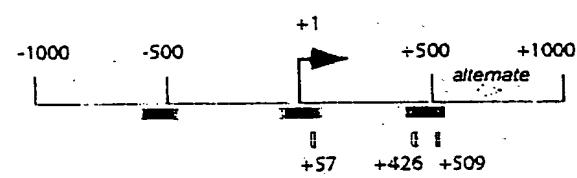


Figure 15

A



B



C

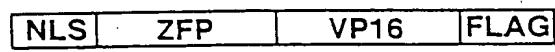
ZFP Name	Target		Finger Designs
	Sequence 5' - 3'	Subsites 5' - 3'	
mVZ+57	TGAGCGGGCGGCAGCGGAGC	CGA <sub>9</sub> GCGG GCG <sub>4</sub> CCA <sub>9</sub> GCG <sub>7</sub> GAG <sub>2</sub>	QSGHLTK F6 RSDELSR F3 RSDELTR F4 QSGLLTR F3 RSDELQR F2 RSCLNLR F1
mVZ+426	GGGGGTGACc	GGG <sub>9</sub> GGG <sub>7</sub> GAC <sub>2</sub>	RSCHLSR F3 TSGHLVR F2 DRSNLTR F1
mVZ+509	GCTGGGGGCg	GCT <sub>9</sub> GGG <sub>6</sub> GGC <sub>9</sub>	QSSCLTR F3 RSDELTR F2 DRSHLTR F1

D

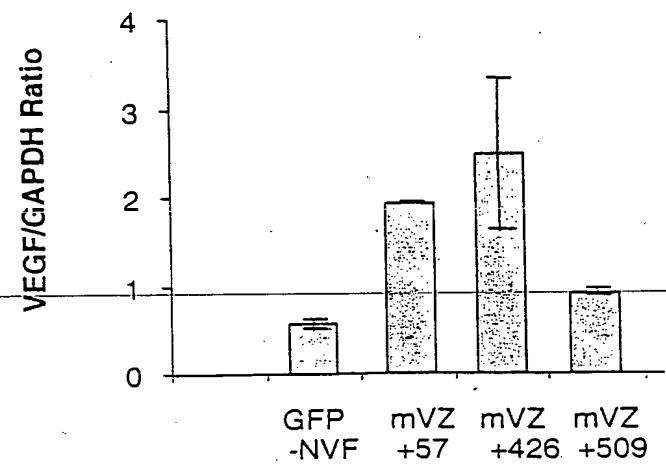
ZFP	Target	Gel Shift	Apparent Kd (nM)
mVZ+57	TGAGCGGGCGGCAGCGGAGC	Bound Free	0.031
mVZ+426	GGGGGTGACc	Bound Free	<0.01
mVZ+509	GCTGGGGGCg	Bound Free	<0.01
SP1	GGGGCGGGGg	Bound Free	0.053

Figure 16

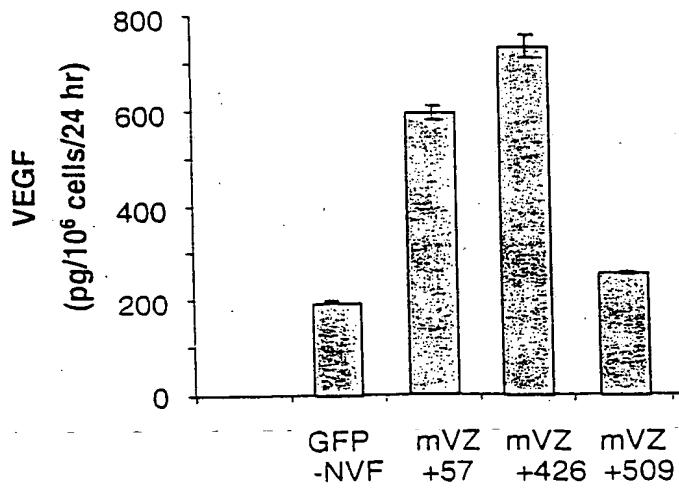
A



B



C



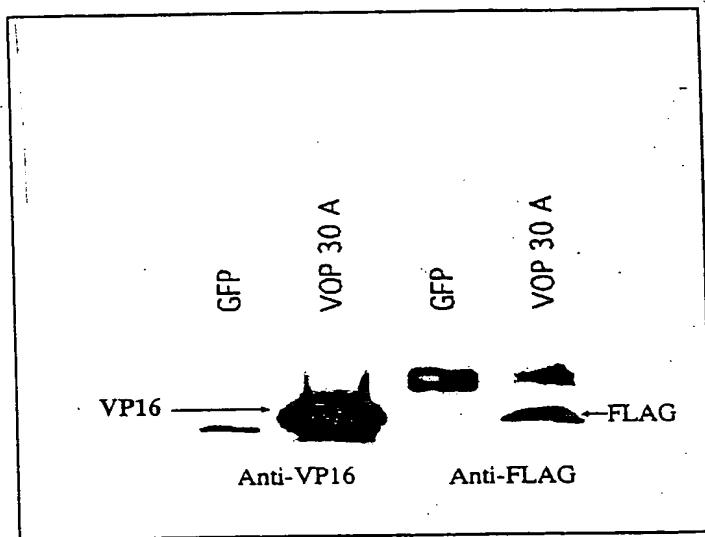


FIG. 17A

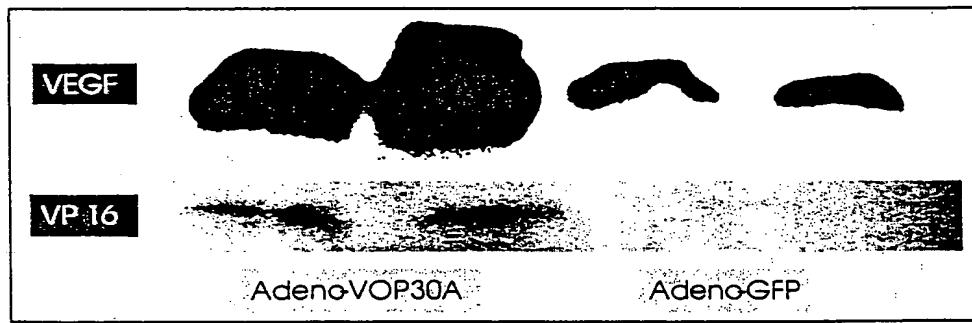


FIG. 17B

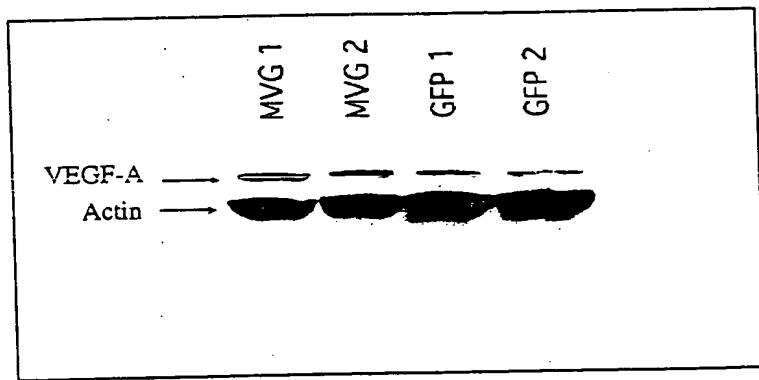


FIG. 17C

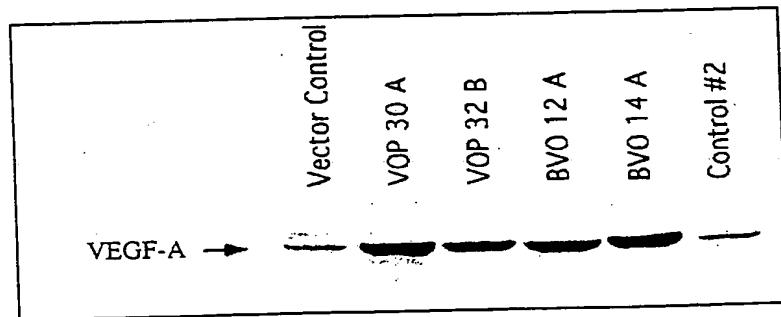


FIG. 17D

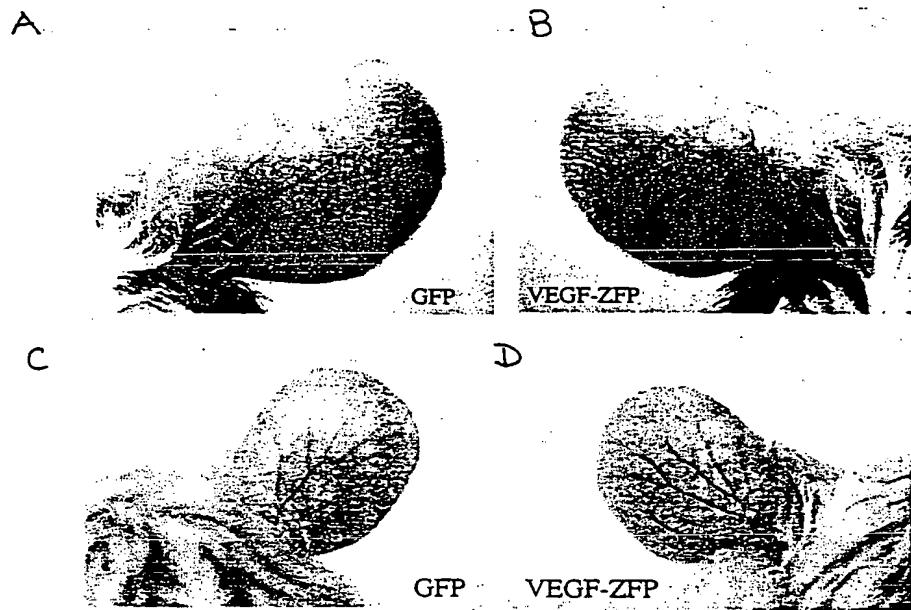


FIG. 18

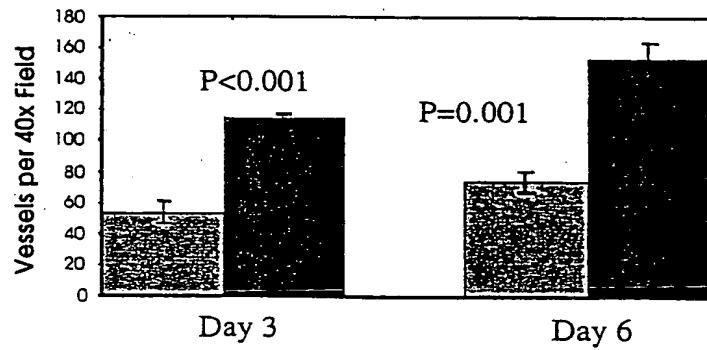


FIG. 18 E

FIG. 19A

GFP



FIG. 19B

MVG

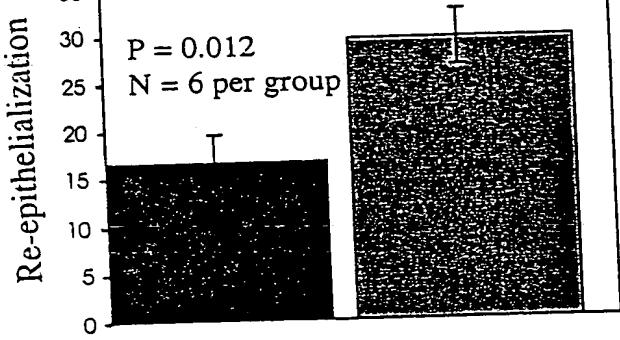
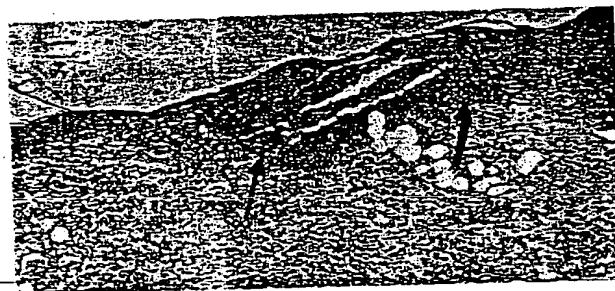
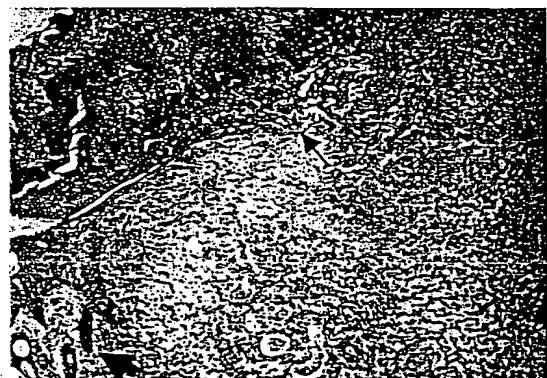
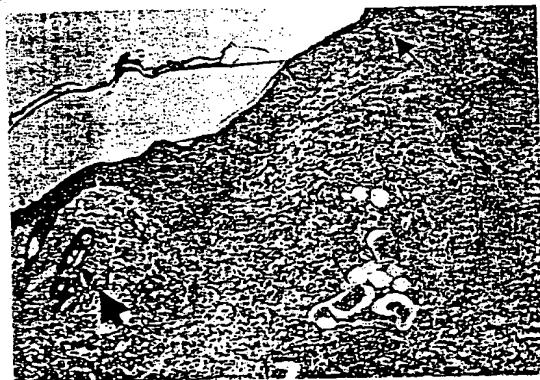


FIG. 19C



## VEGF-ZFP (MVG) (MVG)

FIG. 20A



GFP Control

FIG. 20B

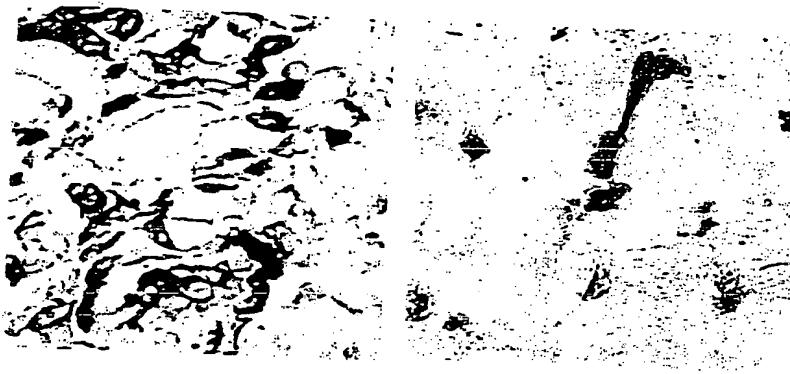


FIG. 21 A

FIG. 21 B

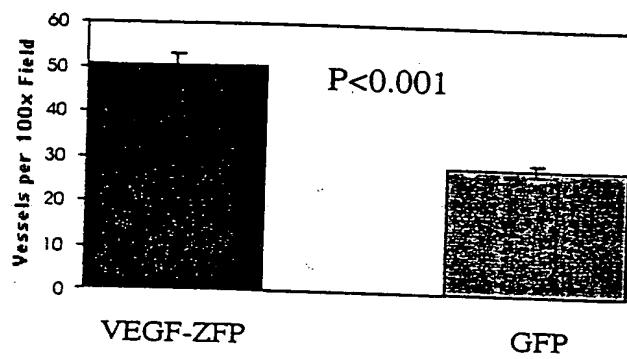


FIG. 21 C

**Figure 22**

